

WHAT IS CLAIMED IS:

1. An access control system for a nonvolatile memory, the system comprising:
 - a nonvolatile memory;
 - a boot ROM (Read Only Memory) in which a program for initializing the system is stored;
 - a CPU (Central Processing Unit) for issuing a command to the nonvolatile memory; and
 - an access control circuit for receiving the command from the CPU and controlling access to the nonvolatile memory,
- 10 wherein at every power-on of the system, the CPU executes the program for initializing the system stored in the boot ROM so that an unrewritable area is set at only one time in the nonvolatile memory and a written flag is set at only one time in the unrewritable area, and
 - the access control circuit prohibits writing to the nonvolatile memory before checking the state of the written flag and, after checking the state of the written flag, the access control circuit permits writing to the unrewritable area at any number of times as long as the written flag does not indicate prohibition of rewriting, while prohibiting writing to the unrewritable area after prohibition of rewriting has been set in the written flag.

- 20 2. The access control system of claim 1, wherein the access control circuit includes a command analyzing section for analyzing the command received from the CPU, and
 - the command analyzing section does not transmit the command received from the CPU to the nonvolatile memory if the command received from the CPU indicates writing or erasing to the nonvolatile memory, the writing or erasing is directed to the unrewritable area in the nonvolatile memory and the written flag indicates prohibition of rewriting.

3. The access control system of claim 2, wherein if a special command line is needed for writing or erasing to the nonvolatile memory, the command analyzing section analyzes all the commands received from the CPU, and if the command line indicates writing or erasing to the nonvolatile memory, the writing or erasing is directed to the unrewritable area in the nonvolatile memory and the written flag indicates prohibition of rewriting, the command analyzing section does not transmit a command line received from the CPU to the nonvolatile memory at all.

10 4. The access control system of claim 2, wherein if a special command line is needed for erasing all the data in the nonvolatile memory, the command analyzing section analyzes all the commands received from the CPU, and if the command line indicates erasing all the data in the nonvolatile memory and the written flag indicates prohibition of rewriting, the command analyzing section does not transmit a command line received from 15 the CPU to the nonvolatile memory at all.

5. The access control system of claim 1, wherein an unused area in which no useful data is placed is provided in the nonvolatile memory,

20 the access control circuit includes a command analyzing section for analyzing the command received from the CPU, and

the command analyzing section operates such that writing or erasing is performed in the unused area in the nonvolatile memory if the command received from the CPU indicates writing or erasing to the nonvolatile memory, the writing or erasing is directed to the unrewritable area in the nonvolatile memory and the written flag indicates prohibition 25 of rewriting.

6. The access control system of claim 5, wherein if a special command line is
needed for writing or erasing to the nonvolatile memory, the command analyzing section
analyzes all the commands received from the CPU, and if the command line indicates
5 writing or erasing to the nonvolatile memory, the writing or erasing is directed to the
unrewritable area in the nonvolatile memory and the written flag indicates prohibition of
rewriting, the command analyzing section operates such that writing or erasing is
performed in the unused area in the nonvolatile memory.

10 7. The access control system of claim 5, wherein if a special command line is
needed for erasing all the data in the nonvolatile memory, the command analyzing section
analyzes all the commands received from the CPU, and if the command line indicates
erasing all the data in the nonvolatile memory and the written flag indicates prohibition of
rewriting, the command analyzing section operates such that all the data in the unused area
15 in the nonvolatile memory is erased.

8. The access control system of claim 1, wherein the access control circuit detects
writing or erasing to the unrewritable area in the nonvolatile memory and, if the written
flag indicates prohibition of rewriting, erases data in the area except for the unrewritable
20 area in the nonvolatile memory.

9. The access control system of claim 1, wherein the access control circuit detects
writing or erasing to the unrewritable area in the nonvolatile memory and, if the written
flag indicates prohibition of rewriting, rewrites all the data in the nonvolatile memory such
25 that the data have the same value as the written flag.